

# CLAIMS

1. A method for establishing a packet data communication connection in a communication network between a first user equipment (UE A) and a second user equipment (UE B), said communication network comprising

- at least two access networks (RAN A, RAN B) for establishing a data path between the communication network and the respective user equipment (UE A, UE B), said first user equipment (UE A) being connected with one of said at least two access networks (RAN A) and said second user equipment (UE B) being connected with the other one of said access networks (RAN B),
- at least two serving nodes (SGSN A, SGSN B) for controlling a respective different one of said access networks (RAN A, RAN B), and
- at least one database (200) for storing information used for a communication connection in said communication network and connected with said at least two serving nodes,

said method comprising the steps of:

- requesting (S2) a communication connection to the second user equipment (UE B) by the first user equipment (UE A) to the respective serving node (SGSN A), such a request including a specific fixed information element for an identification of the second user equipment (UE B),
- determining (S3) in said database (200) on the basis of said specific fixed information element identifying the second user equipment (UE B) a location of said second user equipment (UE B) within the communication network at the respective other serving node (SGSN B),
- deciding (S5, S6), whether said second user equipment (UE B) is reachable or accepts the communication connection or not, and if the decision is positive,
- establishing (S7) the communication connection between the first and the second user equipment (UE A, UE B) via a direct connection between said serving nodes (SGSN A, SGSN B) adapted to perform a packet data communication.

2. A method according to claim 1, further comprising the step of

- canceling (S8, S11) the packet data communication connection when either the first user equipment (UE A) or the second user equipment (UE B) deactivates the connection.

3. A method according to claim 1, further comprising the steps of, if the decision in the deciding step (S6) is negative,

indicating (S9) an error message including an appropriate value to the first user equipment (UE A), and

canceling (S10, S11) the data path.

4. A method according to claim 1, wherein said specific fixed information element used for the identification of said second user equipment (UE B) is an E.164 address of said second user equipment (UE B).

5. A method according to claim 1, wherein the communication connection established in said establishing step (S7) is routed via another network element if a handover is performed for at least one of the user equipments (UE A, UE B).

6. A device for performing a packet data communication in a communication network between a first user equipment (UE A) and a second user equipment (UE B), said communication network comprising

at least two access networks (RAN A, RAN B) for establishing a data path between the communication network and the respective user equipment (UE A, UE B), said first user equipment (UE A) being connected with one of said at least two access networks (RAN A) and said second user equipment (UE B) being connected with the other one of said access networks (RAN B), at least two serving nodes (SGSN A, SGSN B) for controlling a respective different one of said access networks (RAN A, RAN B), and

at least one database (200) for storing information used for a communication connection in said communication network and connected with said at least two serving nodes,

said device (100) comprising

detection means (110) for detecting a request for a communication connection to the second user equipment (UE B) by the first user equipment (UE A), such a request including a specific fixed information element for an identification of the second user equipment (UE B),

requesting/obtaining means (120) for requesting and obtaining a location of said second user equipment (UE B) within the communication network at the respective other serving node (SGSN B) from said database (200) on the basis of said specific fixed information element identifying the second user equipment (UE B),

connection requesting means (130) for requesting a connection from said second user equipment (UE B) and for deciding, whether said second user equipment (UE B) is reachable or accepts the communication connection or not, and

connection establishing/canceling means (140) for establishing the communication connection between the first and the second user equipment (UE A, UE B) via a direct connection between said serving nodes (SGSN A, SGSN B) adapted to perform a packet data communication.

7. A device according to claim 6, wherein said connection establishing/canceling means (140) is adapted to cancel the packet data communication connection when either the first user equipment (UE A) or the second user equipment (UE B) deactivates the connection.

8. A device according to claim 6, wherein, if the decision by said connection requesting means (130) is negative, said connection establishing/canceling means (140) is adapted to

indicate an error message including an appropriate value to the first user equipment (UE A), and  
cancel the data path.

9. A device according to claim 6, wherein said specific fixed information element used for the identification of the second user equipment (UE B) is an E.164 address of said second user equipment (UE B).

10. A device according to claim 6, wherein the communication connection established by said connection establishing/canceling means (140) is routed via another network element if a handover is performed for at least one of the user equipments (UE A, UE B).